MWI 1280.5 REVISION F

EFFECTIVE DATE: October 15, 2004 EXPIRATION DATE: October 15, 2009

# MARSHALL WORK INSTRUCTION

**QD01** 

# MSFC ALERT PROCESSING

CHECK THE MASTER LIST at https://repository.msfc.nasa.gov/directives/directives.htm
VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
	<b>Date: October 15, 2004</b>	Page 2 of 32	

# **DOCUMENT HISTORY LOG**

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		5/14/99	Document converted from MSFC-P14.2-C01 to a Directive. Previous history retained in system as part of canceled or superseded ISO Document files.
Revision	A	8/20/99	Document changed to match revised MSFC organization and to eliminate MMI 5310.2
Revision	В	4/8/02	Revised to eliminate reference to specific S&MA organization codes and to match web-based response techniques
Revision	С	8/16/02	Reduce launch-imminent mode processing from 2 weeks prior to FRR to 2 days before a launch, apply launch-imminent processing for only hardware directly involved in the imminent mission, give the S&MA Shuttle Assurance Manager or his designee authority to evaluate the need for launch-imminent ALERT release, clarify that most distributions are not by groups, and change Open ALERT Summary report from monthly to quarterly (per ISO surveillance audit finding))
Revision	D	1/24/03	Change Footer URL; Change name of records retention document; Revise applicability
Revision	Е	11/21/2003	Add 7-day announcement, delinquent announcement, and 30-day extension features
Revision	F	10/15/2004	Revised to bring document in compliance with the HQ Rules Review Action (CAITS: 04-DA01-0387). Changes were also made to reflect S&MA organizational name changes (i.e., QS to QD).

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
Date: October 15, 2004			

#### 1. PURPOSE

This document establishes the Marshall Space Flight Center (MSFC) responsibilities and instructions for Acute Launch Emergency Restraint Tip (ALERT) and ALERT-type notification processing for government hardware described in MPD 1280.1, "Marshall Management Manual."

The MSFC system for processing ALERTs and ALERT-type notifications is designed to (1) prevent occurrence on MSFC-controlled products of nonconformances documented in the Government-Industry Data Exchange Program (GIDEP), NASA ALERT processing systems, or similar notification systems; (2) provide the impact of identifying and correcting ALERT and ALERT-type product problems on MSFC-controlled products when requested; (3) prevent occurrence on other government products of product supplier problem issues which are found on MSFC government products; and (4) satisfy requirements of NSTS 5300.4 (1D-2), NPD 8720.1, NPD 8730.2, NPR 8735.1, and NPD 1280.1.

#### 2. APPLICABILITY

This Marshall Work Instruction (MWI) shall be applicable to all MSFC organizations and programs, which use, develop, or provide products for the government or government entities. This includes flight hardware, ground support equipment, test equipment, and other products used by MSFC government or government support personnel on or in support of government programs. For projects, the reporting response is not generally required until hardware procurement has begun and remains in force through all mission duty cycles.

In order to perform ALERT screening adequately for all flight and ground support Material Traceability Level 1 and 2 components as determined by the project manager or systems engineer in accordance with MPR 8040.2, each evaluating organization shall have parts traceability for those components by manufacturer and part number and, if applicable and available, serial number and lot/date code. Each evaluating organization shall also clearly identify where and how the component is used throughout its various integrated equipment. This requires advance planning for any component used in a Material Traceability Level 1 or 2 operation. While this detailed level of traceability is not required for Material Traceability Level 3 and 4 components, ALERT processing shall be performed on all government equipment to the greatest extent possible based on each component's available traceability defined in MPR 8040.2.

#### 3. APPLICABLE DOCUMENTS

- 3.1 MPR 8040.2, "Product Identification and Traceability"
- 3.2 MPD 8720.1, "MSFC Reliability and Maintainability Program for Space Systems"
- 3.3 MPR 8730.3, "Control of Nonconforming Product"

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
Date: October 15, 2004 Page 4 of 32			

- 3.4 NSTS 5300.4 (1D-2), "Safety, Reliability, Maintainability and Quality Provisions for the Space Shuttle Program"
- 3.5 NPD 2110.1, "Foreign Access to NASA Technology Transfer Materials"
- 3.6 NPR 8735.1, "Procedures for Exchanging Parts, Materials, and Safety Problem Data Utilizing the Government-Industry Data Exchange Program and NASA Advisories"
- 3.7 NPR 1441.1, "NASA Records Retention Schedules"
- 3.8 NPD 8720.1, "NASA Reliability and Maintainability (R&M) Program Policy"
- 3.9 NPD 8730.2, "NASA Parts Policy"
- 3.10 NPD 1280.1, "NASA Management System Policy"
- 3.11 SO300-BT-PRO-010, "GIDEP Operations Manual"

#### 4. REFERENCES

None

#### 5. DEFINITIONS AND ACRONYMS

Specific definitions and acronyms relative to this instruction are:

- 5.1 <u>ALERT (Acute Launch Emergency Restraint Tip)</u>. A standardized report prepared by a GIDEP participant for the identification and notification of actual or potential problems on nonconforming parts, components, materials, manufacturing processes, test equipment, construction materials, office equipment, chemicals, or computer software. ALERTs are submitted on GIDEP Form 97-1. Within this document, the term ALERT is expanded beyond its formal GIDEP definition to include any ALERT-type notification as defined in Section 5.2.
- 5.2 <u>ALERT-Type Notification</u>. A general term for any product notification comparable to GIDEP ALERTs sent out with an MSFC ALERT identification number for evaluation and impact. Included are GIDEP ALERTs, GIDEP problem advisories, GIDEP safe ALERTs, GIDEP agency action notices, NASA advisories, Office of Inspector General (OIG) information requests, NASA TWX notifications, and NASA advance notifications of potential problem situations.
- 5.3 <u>GIDEP</u>. Government-Industry Data Exchange Program is a cooperative activity between government and industry participants seeking to reduce or eliminate expenditures of resources by making maximum use of existing information. The program provides a medium to exchange

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
Date: October 15, 2004			

technical information essential during research, design, development, production and operation phases of the life cycle of systems, facilities, and equipment. GIDEP is managed and funded by the U. S. Government. Among its participating organizations are U. S. Government and hundreds of industrial organizations producing parts, components, and equipment for the government.

- 5.4 <u>GIDEP Agency Action Notice</u>. A Government-Industry Data Exchange Program document for distributing problem information issued by a Government Agency to GIDEP participants.
- 5.5 <u>Information Only</u>. Information only augments a previous notification, is not of a critical nature, or is not expected to affect a vendor's operation and does NOT require response from actionees unless an impact requires remedial or corrective action.
- 5.6 <u>Material Traceability Levels</u>. A numerical code ranging from 1 to 4, used to identify material traceability requirements on Engineering Parts Lists. It identifies traceability requirements for individual parts, assemblies, or subassemblies. (Ref: MPR 8040.2)
- 5.7 <u>MSFC ALERT Coordinator</u>. Person nominated by the S&MA Director and appointed by the Center Director to coordinate ALERT and ALERT-type document processing for MSFC and to be the official MSFC interface with GIDEP and other NASA Centers regarding ALERTs or a designated representative.
- 5.8 <u>NASA Advisory</u>. A NASA document for exchanging significant parts, materials, and safety problems or concerns among NASA activities.
- 5.9 <u>Organization ALERT Coordinators</u>. Persons designated by the MSFC organization's lead (Directorate lead, Project Manager, etc.) to coordinate ALERT and ALERT-type document processing by the MSFC organizational unit. They include an Evaluator who reviews the ALERT for applicability and offers countermeasures for impacts, a Reviewer who reviews both of those inputs for accuracy, and an Impact Reviewer who reviews the adequacy of countermeasures for impacted ALERTs.
- 5.10 <u>Problem Advisory (PA)</u>. (1) Preliminary information on a suspected problem or (2) A Government-Industry Data Exchange Program document reporting a problem with parts, components, materials, manufacturing processes, specifications, software, facilities, or test equipment having an unknown or low probability of causing problems for other users.
- 5.11 <u>Safe-ALERT (SA)</u>. A notice of defective or nonconforming items, products, or conditions that create a safety hazard for personnel or equipment.

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
Date: October 15, 2004 Page 6 of 32			

# 6. INSTRUCTIONS

<u>Actionee</u>	<b>Section</b>	Shall perform all actions
Organization/Projec t Management	6.1	Including ALERT Processing in Organization Plans/Contract Requirements. Each MSFC organization responsible for work related to government hardware shall include ALERT participation as a part of its operation and planning. Depending on the organization involved, this shall be stated it one of the following or a similar document: the Project Plan, the Reliability Plan, a task agreement, operating instructions, or the contract. The organization shall model their requirements after the sample requirements statement provided in Appendix A, Standard Data Requirement Description (DRD) STD/RM-ALERT, MSFC ALERT System Documentation.
S&MA Project Representative		If a flight hardware project is involved, the Safety and Mission Assurance (S&MA) Project Representative shall assure that such a requirement and/or plan to implement this requirement is included. The organization shall assign prime points of contact for ALERT notification, tracking, and response.
MSFC Organization Lead	6.1.1	The MSFC Organization Lead shall include ALERT participation in organization operation plans, agreements, requirements, and/or contracts related to government hardware procurement, development, or use.
		NOTE: Appendix A provides the location of the current Standard ALERT DRD which shall be used as a model in Government hardware-related contracts.
MSFC Organization Lead	6.1.2	MSFC Organization Lead shall appoint organization ALERT Coordinators to serve as prime points of contact for ALERT notification, tracking, review, and response. The MSFC ALERT Coordinator shall be informed by the MSFC organization lead of these appointments.
MSFC ALERT Coordinator	6.1.3	The MSFC ALERT Coordinator shall add organizational ALERT Coordinators to distribution for ALERTs and shall provide training materials/instruction in ALERT processing as required by the organizational ALERT Coordinators.

Marshall Work Instruction		
QD01		
MSFC ALERT Processing MWI 1280.5 Revision: F		
	Date: October 15, 2004	Page 7 of 32

<b>Actionee</b>	Section	Shall perform all actions
S&MA Project Representative	6.1.4	If a flight hardware project is involved, the S&MA Project Representative shall assure that ALERT participation planning is included for the Project and shall assure that adequate parts traceability is specified in keeping with Section 2 of this document.
	6.2	According to the "GIDEP Operations Manual," generation of an ALERT shall be the obligation of the organization that initially discovers product nonconformance. Precise rules for when and how ALERTs shall be generated and submitted are clearly stated in the "GIDEP Operations Manual." The Organization ALERT Coordinators shall follow those instructions in initiating the ALERT not more than 60 days from time of discovery of the nonconforming or defective item. If assistance is required, the organization's ALERT Coordinators shall contact the MSFC ALERT Coordinator for access, assistance, or review.
		ALERT submittal shall consist of the following steps:
MSFC ALERT Originator	6.2.1	The MSFC ALERT Originator shall complete GIDEP Form 97-1 (shown and explained in Appendix B).
MSFC ALERT Originator	6.2.2	The MSFC ALERT Originator shall provide a copy of the Form 97-1 draft to the MSFC ALERT Coordinator for review, approval, and distribution within the NASA community (reference section 6.3).
MSFC ALERT Originator	6.2.3	The MSFC ALERT Originator shall send the draft ALERT information to the product supplier to provide them an opportunity to respond.
MSFC ALERT Originator	6.2.4	The MSFC ALERT Originator shall transmit the official form and supplier response (if any) to GIDEP after MSFC approval and at least 15 but not more than 30 working days after supplier notification.
	6.3	Receiving and Distributing ALERTs. Receipt and distribution of ALERTs and ALERT-type notifications for MSFC shall be performed by the MSFC ALERT Coordinator.

Marshall Work Instruction			
QD01			
MSFC ALERT Processing MWI 1280.5 Revision: F			
	<b>Date: October 15, 2004</b>	Page 8 of 32	

<u>Actionee</u>	Section	Shall perform all actions
MSFC ALERT Coordinator	6.3.1	The MSFC ALERT Coordinator shall receive ALERTs and ALERT-type notifications from GIDEP, other NASA Centers, and within MSFC, usually by electronic mail or facsimile transmission, and sometimes hardcopy.
MSFC ALERT Coordinator	6.3.2	The MSFC ALERT Coordinator shall screen the information for potential aerospace applicability.
MSFC ALERT Coordinator	6.3.3	If information <i>is</i> potentially applicable, the MSFC ALERT Coordinator shall determine whether new or updated information, shall assign an MSFC tracking number, and shall enter it into the receipt log.
MSFC ALERT Coordinator	6.3.4	When one or more ALERT-type notifications are received (not to exceed two work days from receipt of the oldest notification, except for two days prior to launch in which notifications are held until after launch unless specifically authorized for release by the S&MA Shuttle Assurance Department Manager or his designated representative as critical for mission safety), the MSFC ALERT Coordinator shall prepare the MSFC ALERT Notification, Tracking, and Response Data System for ALERT distribution, by:
		<ul> <li>Entering basic ALERT data into an ALERT record</li> <li>Downloading the image file to an MSFC web-accessible location</li> <li>Generating and saving the monthly distribution summary sheet for web call up</li> <li>Updating the MSFC ALERT web page</li> <li>Updating the MSFC ALERT archive for the new ALERT distribution</li> </ul>
MSFC ALERT Coordinator	6.3.5	The MSFC ALERT Coordinator shall distribute information through the database and associated e-mail to all Organization ALERT Coordinators for response and to others, as requested, for information purposes only.
		NOTE: S&MA historical ALERT-type data (distributed at MSFC from April 1997 forward) is available on the web at URL: https://msfcsma3.msfc.nasa.gov/tech/pac/opl/alert.html

Marshall Work Instruction		
QD01		
MSFC ALERT Processing MWI 1280.5 Revision: F		
	Date: October 15, 2004	Page 9 of 32

Actionee	<b>Section</b>	Shall perform all actions
MSFC ALERT Coordinator	6.3.6	The MSFC ALERT Coordinator shall record the organizations that received the distribution using the data system to track responses.
	6.4	Evaluating and Responding to ALERTs. When an MSFC ALERT distribution is received by an Organization ALERT Coordinator, the coordinator shall generate or obtain an impact of each ALERT for that organization's hardware and operation, including any government subcontractors. Under normal circumstances, the initial impact evaluation and the full response with corrective action included for impacted ALERTs shall be submitted within 21 workdays. For flight-related hardware projects involved in an imminent mission, this evaluation and response schedule shall be accelerated to require response prior to scheduled launch.
Organization ALERT Coordinator	6.4.1	The organization ALERT Coordinator shall perform ALERT evaluation by comparing each hardware ALERT item against hardware used within or stocked by the organization.
Organization ALERT Coordinator	6.4.2	For each ALERT for which the hardware is NOT used or stocked by the organization, the organization ALERT Coordinator shall submit a NO IMPACT indication into the MSFC ALERT data response data record (Appendix D).
Organization ALERT Coordinator	6.4.3	If a part identified in an ALERT involves organization hardware, the organization ALERT Coordinator shall record an IMPACT in the MSFC ALERT Response data record, along with the first half of an ALERT Impact Response page (Appendix D) to include an assessment of the significance of the issue for that organization's sphere of responsibility, and, in coordination with other personnel within the organization as required, shall begin developing an appropriate response to the potential discrepant condition including, but not limited to, generation of nonconformance correction documentation (reference MPR 8730.3, "Control of Nonconforming Product").
Organization ALERT Coordinator	6.4.4	Within the required initial response time (21 workdays or prior to launch), the organization ALERT Coordinator shall submit the initial impact information through data record

Marshall Work Instruction QD01			
MSFC ALERT Processing	MWI 1280.5	Revision: F	
	Date: October 15, 2004	Page 10 of 32	

# Actionee Section Shall perform all actions

update to the MSFC ALERT Coordinator. If

- the response is from seven days before becoming delinquent through not more than 30 days after becoming delinquent,
- the hardware is not applicable to a mission/use occurring within 30 days of the Response Due date, and
- there is a legitimate justification for needing a 30-day extension, the Organization ALERT Coordinator shall initiate a one-time 30-day response extension by selecting the option from the electronic system menu, specifying the ALERT involved, and entering justification for the extension. This shall cause the due date to be extended to 30 days beyond the original Response Due Date.

# Organization 6.4.5 ALERT Coordinator

If an impact was identified, the organization ALERT Coordinator shall complete and submit the ALERT Impact Response field information into the MSFC ALERT data system record within 21 workdays or prior to launch as required from initial notification, and include a description of an appropriate countermeasure to address the problem.

NOTE: For international partners, summary information only (as shown in Appendix C: MSFC ALERT Problem Summary Chart) is provided to the international partner (per GIDEP regulations and NPD 2110.1) and potential impact evaluations are coordinated by the MSFC organization with information provided by the international partner.

6.5 Tracking/Evaluating ALERT Responses. The MSFC
ALERT Coordinator shall track the status of distributed
MSFC ALERTs within MSFC. All distributed ALERTs
except those distributed "FOR INFORMATION ONLY"
shall be open against each organization receiving the
ALERT until either a NO IMPACT or an IMPACT but
acceptable countermeasure is submitted by the Organization
ALERT Coordinator through the MSFC ALERT
Notification, Tracking, and Response Data System.

# MSFC ALERT Coordinator

6.5.1

The MSFC ALERT Coordinator shall record the identification of each organization receiving each ALERT individually in the MSFC ALERT Notification, Tracking,

CHECK THE MASTER LIST at https://repository.msfc.nasa.gov/directives/directives.htm VERIFY THAT THIS IS THE CORRECT VERSION BEFORE USE

Marshall Work Instruction			
QD01			
MSFC ALERT Processing	MWI 1280.5	Revision: F	
	Date: October 15, 2004	Page 11 of 32	

<u>Actionee</u>	<b>Section</b>	Shall perform all actions	
		and Response Data System.	
		Each ALERT issued other than FOR INFORMATION ONLY shall be open against each receiving organization.	
Organization ALERT Coordinators	6.5.2	If there is no impact to the organization receiving an ALERT, the ALERT Evaluator shall submit a NO IMPACT evaluation and the Organization ALERT Reviewer shall approve that evaluation before the ALERT shall be closed in the data tracking system for that responding organization.	
Organization ALERT Coordinators	6.5.3	If an IMPACT is identified, the Organization ALERT Reviewer shall enter that information into the data system.	
Organization ALERT Coordinators	6.5.4	When completed impacted ALERT evaluation response and countermeasure information is entered, the Reviewer and Impact Reviewer shall review the information to determine whether or not a sufficient countermeasure has been identified.	
Organization ALERT Coordinators	6.5.5	If an acceptable countermeasure is specified, the Reviewer and Impact Reviewer shall enter their concurrence into the data tracking system and the ALERT shall be closed for the organization.	
Organization ALERT Coordinator(s)	6.5.6	If the countermeasure is not satisfactory based on evaluation by the Reviewer and/or Impact Reviewer, the Reviewer and/or Impact Reviewer shall record in the database inadequate areas and shall submit the closure rejection into the database, causing the data system to forward the rejection notification to the Organization ALERT Evaluator for resolution or clarification.	
Organization ALERT Coordinators	6.5.7	If no mutually acceptable resolution is obtained through technical interface interaction, the Reviewer and Impact Reviewer shall elevate the issue to the S&MA Director and the organization lead for resolution.	
MSFC ALERT Coordinator	6.5.8	The MSFC ALERT Coordinator shall file and maintain hardcopies of each organization's response as specified in the Records portion of this document (see Section 9 below).	

Marshall Work Instruction			
QD01			
MSFC ALERT Processing	MWI 1280.5	Revision: F	
	Date: October 15, 2004	Page 12 of 32	

<u>Actionee</u>	<b>Section</b>	Shall perform all actions
	6.6	Generating Regular and Ad Hoc Reports. The MSFC ALERT Coordinator shall generate and distribute regular and ad hoc reports regarding MSFC ALERT activities.
MSFC ALERT Coordinator	6.6.1	Within 15 calendar days of the end of each quarter: The MSFC ALERT Coordinator shall use the MSFC ALERT Notification, Tracking, and Response Data Base to generate an Open Delinquent ALERTs Tabulation Report, which lists the number of delinquent ALERTs open against the various MSFC organizations. The MSFC ALERT Coordinator shall then circulate the information is this report to the various MSFC organizations.
MSFC ALERT Coordinator	6.6.2	For the GIDEP Annual Utilization Report during each October: According to GIDEP requirements, the MSFC ALERT Coordinator shall generate a GIDEP Utilization Report as specified in the "GIDEP Operations Manual." This report shall itemize impacts and cost avoidances to MSFC resulting from the use of GIDEP resources.  The MSFC ALERT Coordinator shall submit this report to the GIDEP Operations Center by November 1.
MSFC ALERT Coordinator	6.6.3	In support of mission milestones: The MSFC ALERT Coordinator shall extract open ALERTs using the MSFC ALERT Notification, Tracking, and Response Data System, shall compare the open ALERTs and organizations against the mission manifest, and shall itemize and provide for the mission milestone review meeting all open ALERTs against organizations involved in the mission.
MSFC ALERT Coordinator	6.6.4	<b>For ad hoc data requests</b> : The MSFC ALERT Coordinator shall respond to ad hoc requests from various NASA organizations regarding ALERT processing information.
MSFC ALERT Coordinator	6.6.5	For MSFC ALERT Requests for open ALERTS against an organization: The MSFC ALERT Coordinator shall access the MSFC ALERT Notification, Tracking, and Response Data System the MSFC ALERT web page, stored electronic copies of data files, and/or the hardcopy files as necessary to provide

Marshall Work Instruction			
QD01			
MSFC ALERT Processing	MWI 1280.5	Revision: F	
	<b>Date: October 15, 2004</b>	Page 13 of 32	

<u>Actionee</u>	Section	Shall perform all actions
		requested open ALERT data forming an acceptable format.
MSFC ALERT Coordinator	6.6.6	In response to requests for ALERTs regarding a certain manufacturer or hardware component: Access the GIDEP Data System or the NASA Electrical, Electronic, and Electromechanical (EEE) Parts Information Management System (EPIMS) to extract related data, to be reviewed and provided to the requester.
MSFC ALERT Data System	6.6.7	When the current date is seven days before the Response Due Date or is the day after the Response Due Date and the ALERT is not CLOSED for an organization: The MSFC data system shall be programmed to automatically initiate electronic notification to all three organization Points of Contact to inform them of the approaching or actual delinquent response.
MSFC ALERT Coordinator	6.6.8	At least quarterly, review use of the 30-day extension feature: MSFC ALERT Coordinator shall generate a report from the electronic system that shows use of the 30-day extension feature and the rationale for each use. This report shall be reviewed to evaluate appropriate use of this feature in keeping with the requirements of Section 6.4.4 above. The MSFC ALERT Coordinator shall bring erroneous use to the attention of the offending organization.

# 7. NOTES

None

# 8. SAFETY PRECAUTIONS AND WARNING NOTES

None

# 9. RECORDS

The following records shall be kept and maintained by the S&MA Directorate MSFC ALERT Coordinator:

Record	<u>Repository</u>	Period of Time
MSFC ALERT Notification, Tracking, and	QD:	NPR 1441.1,

Marshall Work Instruction				
QD01				
MSFC ALERT Processing	MWI 1280.5	Revision: F		
	<b>Date: October 15, 2004</b>	Page 14 of 32		

Response Data Base (Electronic)	Designated MSFC S&MA	"NASA Record
	ALERT Coordinator -	Retention
QD: OPR	Maintained Electronically	Schedule"
	on MSFC server with	
	regular backups	8/5
	performed at least weekly	Destroy when 15
	and monthly in accord	years old <da:< td=""></da:<>
	with support contractor	N1-255-94-3>
	procedures	
MSFC ALERT Responses (Hard copy, if any)	QD:	NPR 1441.1,
	Designated MSFC S&MA	"NASA Record
QD: OPR	ALERT Coordinator -	Retention
	Maintained manually in	Schedule"
	hard copy files	
		If impacted:
		5/28
		Destroy 10 years
		after end of the
		project <da: n1-<="" td=""></da:>
		255-94-2>
		If no impact:
		8/5
		Destroy when 15
		years old <da:< td=""></da:<>
		N1-255-94-3>

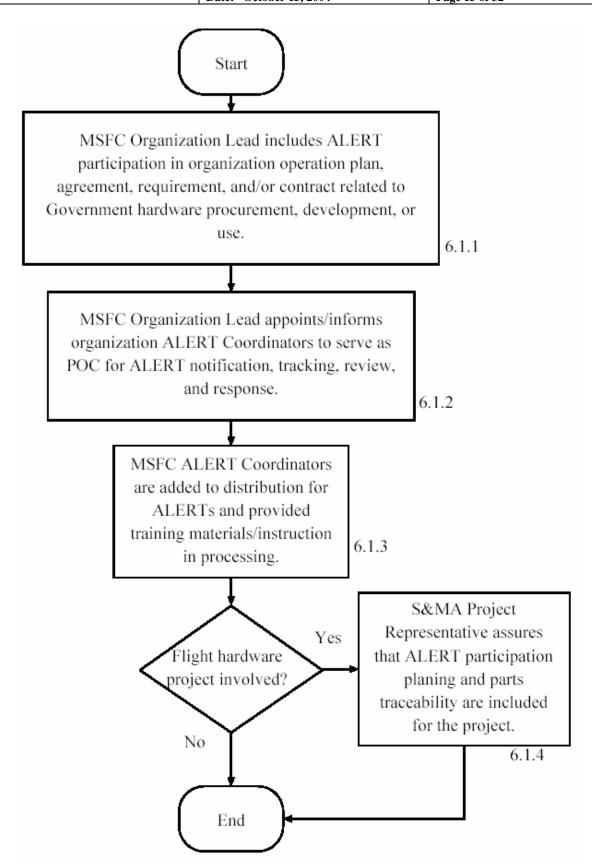
#### 10. PERSONNEL TRAINING AND CERTIFICATION

Each Organization ALERT Coordinator shall attend an initial orientation training session provided by the MSFC ALERT Coordinator and the MSFC ALERT Coordinator shall attend a GIDEP Workshop or clinic or NASA ALERT training event at least once every 3 years.

#### 11. FLOW DIAGRAMS

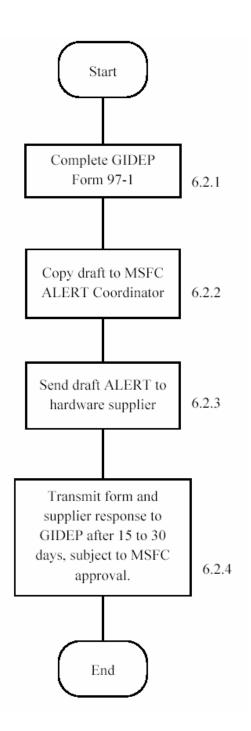
11.1 Including ALERT Processing in Organization Plans/Contract Requirements Flowchart

Marshall Work Instruction				
QD01				
MSFC ALERT Processing MWI 1280.5 Revision: F		Revision: F		
	Date: October 15, 2004	Page 15 of 32		



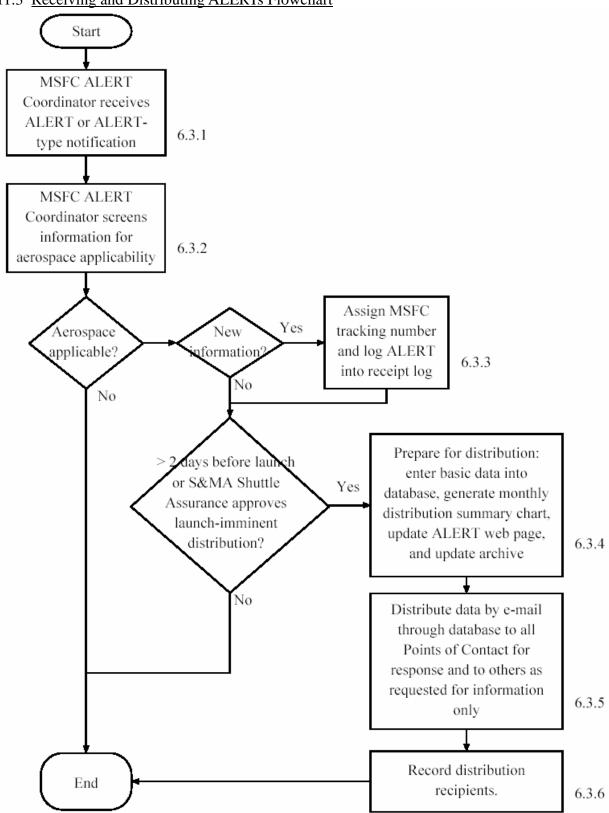
Marshall Work Instruction QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 16 of 32

# 11.2 Generation of ALERTs Flowchart



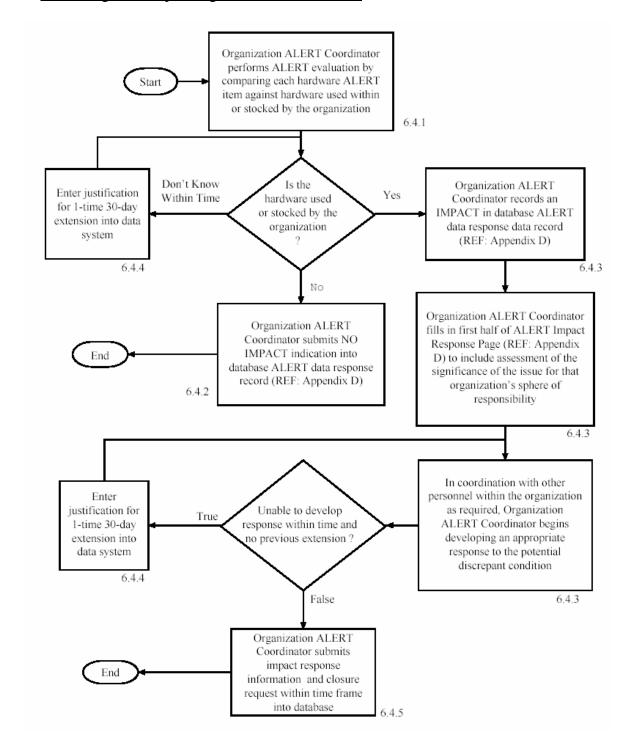
Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 17 of 32

#### 11.3 Receiving and Distributing ALERTs Flowchart



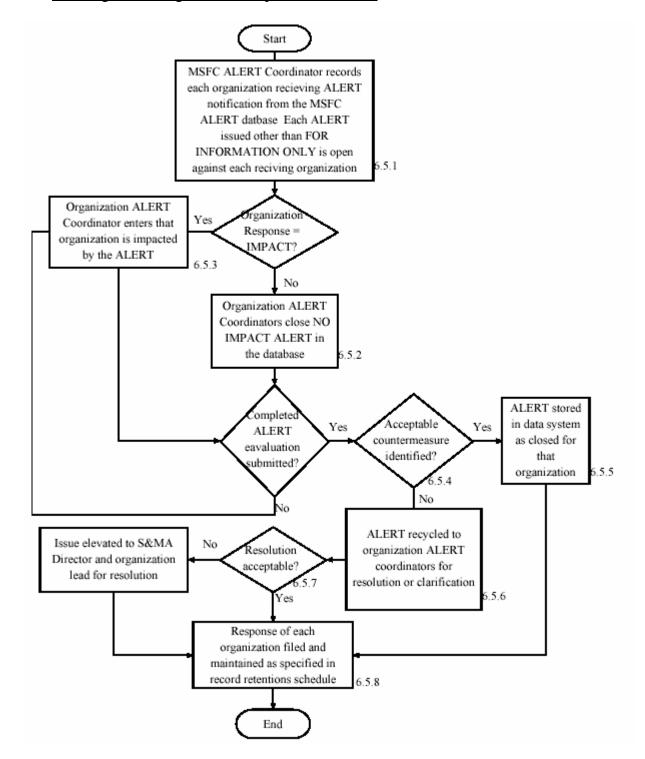
Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 18 of 32

#### 11.4 Evaluating and Responding to ALERTs Flowchart



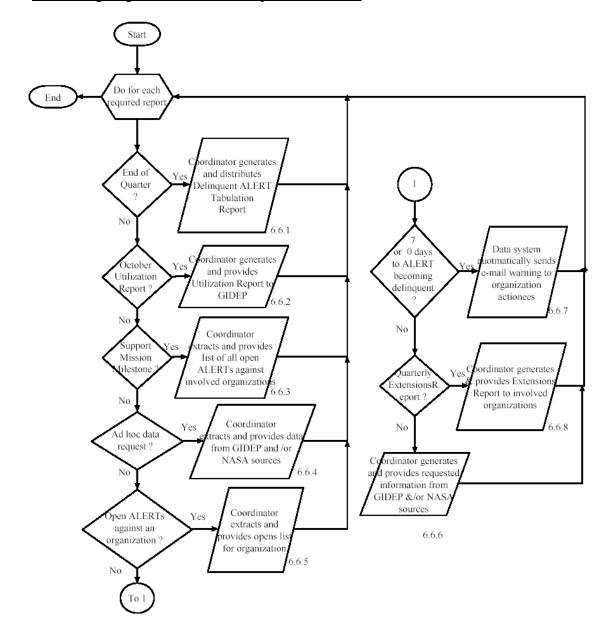
Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 19 of 32

# 11.5 <u>Tracking/Evaluating ALERT Responses Flowchart</u>



Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 20 of 32

# 11.6 Generating Regular and Ad Hoc Reports Flowchart



Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 21 of 32

#### 12. CANCELLATION

MWI 1280.5E dated November 21, 2003

Original signed by Robin N. Henderson for

David A. King Director

Appendix A Standard Data Requirements Definition (DRD) for ALERT Processing

Appendix B GIDEP Form 97-1

Appendix C MSFC ALERT Problem Summary Chart – Typical with Explanation

Appendix D MSFC ALERT Evaluation/Response Form with Instructions

Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	<b>Date: October 15, 2004</b>	Page 22 of 32

# Appendix A

# Standard Data Requirements Description (DRD) for ALERT Processing

Current version of STD/RM-ALERT is from the MSFC Data Requirements Management System available through the MSFC Integrated Document Library located on the web at URL: http://inside.msfc.nasa.gov/MIDL/

Marshall Work Instruction OD01		
MSFC ALERT Processing MWI 1280.5 Revision: F		
	Date: October 15, 2004	Page 23 of 32

# Appendix B

# **GIDEP Form 97-1 and Instructions**

GOVERNMENT - INDUSTRY DATA EXCHANGE PROGRAM				
ALERT				
TITLE (Class, Function, Type, etc.)		2. DOCUMENT NUMBER		
		3. DATE (DD-MMM-YY)		
4. MANUFACTURER AND ADDRESS	5. PART NUMBER	6. NATIONAL STOCK NUM	MBER	
	7. SPECIFICATION	8. TYPE DESIGNATOR		
	9. LOT DATE CODE STAR T	10. LOT DATE CODE END	)	
11. MANUFACTURER'S POINT OF CONTACT (POC)	12. CAGE	13. MANUFACTURER'S FA	x	
The second of th		( )		
14. MFR. POC PHONE	15. MANUFACTURER'S E-MAIL	. ,		
( )				
16. CROSS REFERENCE VENDOR	17. CROSS REFERENCE CAGE	18. CROSS REFERENCE	PART	
19. PROBLEM DESCRIPTION / DISCUSSION / EFFECT				
20. ACTION TAKEN/PLANNED				
21. DATE MFR. NOTIFIED 22. MANUFACTURER'S RESPONSE	23. ORIGINATOR ADDRESS/POINT O	F CONTACT		
REPLY ATTACHED	2011			
NO REPLY				
24. GIDEP REPRESENTATIVE	25. SIGNATURE	<u> </u>	26. DATE	
GIDEP Form 97-1 (October 2000)				

Marshall Work Instruction		
QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	<b>Date: October 15, 2004</b>	Page 24 of 32

#### Instructions For Filling Out GIDEP FORM 97-1

The following instructions (taken directly from the GIDEP Users Manual) shall be performed as described below.

# INSTRUCTIONS FOR COMPLETING ALERT/SAFE-ALERT/PROBLEM ADVISORY FORMS

BLOCK NO. INSTRUCTION

#### 1. TITLE (Class, Function, Type, etc.)

Enter the class, function, type, etc., of the item, part, component, material, chemical, software, specification or process which is non-conforming. (Use DLA Handbook H2/H6 for guidance or contact the GIDEP Operations Center for assistance.)

#### 2. DOCUMENT NUMBER

Enter the ALERT/SAFE-ALERT/Problem Advisory number. The number is composed of your participant code (See Roster); a dash; the letter 'A' for ALERT, 'S' for SAFE-ALERT; or 'P' for Problem Advisory followed by a dash; the government fiscal year (October to September); a dash; and your next sequence number. If you are amending the report, add a letter starting with 'A', in ascending order.

Examples: S3-A-94-01 WR-S-94-03A F3-P-97-01

#### 3. DATE

Enter the date that the report is prepared. Date format is DD-MMM-YY.

Example: 20-AUG-96

#### 4. MANUFACTURER

Enter the name of the manufacturer (or distributor) of the item or service described in block 19, including the address. If more than one manufacturer or distributor is being cited, submit a separate report for each manufacturer. If a specification is the cause of the non-conformance, cite the cognizant authority that issued the specification.

#### 5. PART NUMBER

Enter the part number of the original manufacturer or the value added manufacturer, depending on the origin of the non-conformance or defect.

#### 6. NATIONAL STOCK NUMBER

Enter the government's National Stock Number(s) (NSN) for the parts. If unknown, enter the Federal Stock Class (FSC). Use DLA Handbook H2/H6 or CD-FICHE if available. The GIDEP Operations Center will review CD-FICHE for NSN's that may match part numbers identified in the report.

#### 7. SPECIFICATION

Enter the procurement specification number to which the item was acquired or manufactured. For Commercial Off-The-Shelf (COTS) items, the referred-to specification must have previously been published. If the specification caused the non-conformance, indicate the responsible agency or activity in Block 4.

Marshall Work Instruction OD01		
MSFC ALERT Processing MWI 1280.5 Revision: F		
	<b>Date: October 15, 2004</b>	Page 25 of 32

#### 8. TYPE DESIGNATOR

Enter the alpha/numeric designator of the known system(s) that may be affected by the nonconformance.

Examples: AN/USM-406C AGM-88A

#### 9. LOT DATE CODE START

Enter the beginning lot date code when the manufacturer suspected non-conforming items began to be manufactured. Serial numbers and lot numbers should be included in the Block 19 discussion, if applicable. The date format will normally be YYWW where Y is the year and W is the week.

#### 10. LOT DATE CODE END

Enter the latest lot date code identified with the reported non-conformance.

#### 11. MANUFACTURER'S POINT OF CONTACT (POC)

Enter the name of the point of contact (POC) at the manufacturer's plant that should be contacted for information.

#### 12. CAGE

Enter the CAGE (Commercial and Government Entity) Code for the company location where the parts were manufactured (see DLA Handbook H4/H8).

If the CAGE Code is unknown or doesn't exist, enter NONE. The Operations Center will verify the submitted CAGE Code, if any.

#### 13. MFR. FAX

Enter the phone number of the manufacturer's POC facsimile (FAX) machine.

#### 14. MFR. POC PHONE

Enter the phone number of the manufacturer's POC (current as of date of document)

#### 15. MFR. E-MAIL

Enter the e-mail address of the manufacturer's POC (current as of date of document)

#### 16. CROSS REFERENCE VENDOR

Enter the name of the vendor from whom the part was purchased, if any.

#### 17. CROSS REFERENCE CAGE

Enter the CAGE number of the vendor from whom the part was purchased, if any.

#### 18. CROSS REFERENCE PART

Enter the vendor's part number such as a Source Control Drawing (SCD).

#### 19. PROBLEM DESCRIPTION/DISCUSSION/EFFECT

Describe as accurately and concisely, as possible, the types of item(s) involved, number of items manufactured or involved, number of items tested, number of items non-conforming or failed, failure mode exhibited and cause of failure based upon your failure analysis. Provide any detailed information that may help GIDEP users determine if similar conditions may exist at the plant or

Marshall Work Instruction QD01		
MSFC ALERT Processing	MWI 1280.5	Revision: F
	Date: October 15, 2004	Page 26 of 32

activity. Attach any documentation including test reports, failure analysis, Scanning Electron Microscope (SEM) reports, field reports, photographs, etc. Include all correspondence with the manufacturer, distributor and other participants that may help to resolve the problem. If the originator is aware of a previously published FED on the same general problem, the document number(s) should be referenced in this block. Note! The manufacturer's or supplier's analysis of the problem, non-conformance, defect or safety condition cited does not have to agree with the originator's technical review. If the specification is the cause of the problem, describe the difficulty encountered when using the document. ALERTs/SAFE-ALERTs/Problem Advisories being reissued to provide supplemental information or the manufacturer's response or information received from another source (participant) will contain the statement, "ALERT (or, SAFE-ALERT/Problem Advisory) IS AMENDED TO INCLUDE (state reason)". SAFE-ALERTs issued concurrently with letter of notification to the manufacturer, will contain the statement, "SAFE-ALERT IS ISSUED CONCURRENTLY WITH NOTIFICATION TO THE MANUFACTURER."

#### 20. ACTION TAKEN/PLANNED

Describe actions your organization or the manufacturer is taking, or plans to take, to resolve the problem and prevent recurrence of the non-conformance, defect, or problem. Do not include statements such as "Manufacturer not recommended as a source". Do not make recommendations for actions that GIDEP participants should take regarding the issue.

#### 21. DATE MFR. NOTIFIED

Enter the date of your letter of notification to the manufacturer. The date entered shall correspond to the latest copy of the notification provided to the Operations Center with the report.

#### 22. MANUFACTURER'S RESPONSE

Check the appropriate block. You must attach all of the manufacturer's response (without modification or abridgement) if the block - REPLY ATTACHED is marked (even if it disagrees with your findings).

#### 23. ORIGINATOR ADDRESS/POINT OF CONTACT

Enter the name of the person from the organization originating the report that GIDEP users may contact for additional information. Be sure to include the organization, address, and telephone number.

#### 24. GIDEP REPRESENTATIVE

Enter the name of the GIDEP Representative - the Representative must be the one listed in the GIDEP Roster of Representatives. If the report is being issued by an organization not currently a participant in GIDEP, enter the name of the executive manager authorized to issue such reports.

#### 25. SIGNATURE

Sign the ALERT, SAFE-ALERT, or Problem Advisory prior to forwarding the report to GIDEP. If the report is being submitted electronically, the submitter's authenticity will be verified by the Operations Center. The signature must match the name in block 24 and the registered GIDEP Representative in the Roster of Representatives.

#### 26. DATE

Enter the date when the report is signed or, if electronically submitted, the date transmitted to GIDEP.

Marshall Work Instruction				
QD01				
MSFC ALERT Processing MWI 1280.5 Revision: F				
	<b>Date: October 15, 2004</b>	Page 27 of 32		

# Appendix C

# **MSFC ALERT Problem Summary Chart – Typical with Explanation**

(Fields left blank are ignored.)							
MSFC Issue Date (Beginning): 12/01/2001 MSFC Issue Date (Ending): 12/31/2001							
here ar	re 2 mate	hing recor	ds.				
MSFC number:	GIDEP number:		MFG:	TITLE:	PART number:	LOT number:	PROBLEM DESCRIPTION:
7453A	F3-A-01- 02A	12/14/2001	MEASUREMENTS GROUP, INC	BUTYL RUBBER - ALUMINUM ALLOY CORROSION	M-COAT FB	N/A	THIS AMENDMENT IS ISSUED TO ADD MANUFACTURER RESPONSE INFORMATION. PAGE 1 CONTAINS ORIGINAL DOCUMENT. PAGE 2 THROUG 6 CONTAINS AMENDMENT "A". THIS AMENDMENT IS COMPLETE.
7454	HQ6-A- 02-01	[2/06/200]	TELEDYNE RELAYS	ELECTROMECHANICAL RELAYS	0629	9900 THROUGH 0100	TELEDYNE RELAYS RECEIVED FAILED RELAYS FROM HARRIS FOR FAILURE ANALYSIS AND FOUND PARTS TO BE FUNCTIONAL AT ROOM TEMPERATURE. FAILURE ANALYSIS DID NOT REVEAL ANY VISUAL NOR MECHANICAL ANOMALIES. HARRIS AND TELEDYNE RELAYS DEVELOPED A TEMPERATURE PROFILE THAT SIMULATED THE ENVIRONMENTAL CONDITION IN WHICH THE RELAYS WERE EXPOSED TO IN HARRIS' APPLICATION. SEE FIGURE 1. TELEDYNE RELAYS SUBJECTED TWENTY-FIVE (25) 412VM-0629 RELAYS, WITH LOT DATE CODE 0059105934 FROM FINISHED GOODS TO THE REFERENCED TEMPERATURE PROFILE AND APPLICATION CONDITION. THE TEST SHOWED THAT APPROXIMATELY 20% OF THE RELAYS FAILED TO RETURN TO THEIR NORMALLY CLOSED CONTACT POSITION (UPPER CONTACTS) AFTER THE RELAYS WERE ENERGIZED FOR 246 MINUTES AT RATED COIL VOLTAGE (-620 MILLIWATTS).

Marshall Work Instruction				
QD01				
MSFC ALERT Processing MWI 1280.5 Revision: F				
	<b>Date: October 15, 2004</b>	Page 28 of 32		

### Explanation of MSFC ALERT Problem Summary Chart

**DATE** Official Date of MSFC ALERT Distribution

**ALERT NO (GIDEP)** GIDEP or other document unique identifier, usually from a

source external system; includes a trailing sequential alphabetic character if this is an update to a previously

distributed report

**ALERT NO (MSFC)** MSFC unique sequential identification number for the

ALERT; includes a trailing sequential alphabetic character

if this is an update to a previously distributed report

MANUFACTURER Hardware manufacturer name and address for

manufacturer/supplier of discrepant component involved in

**ALERT** 

**SUBJECT** Name of the faulty component (by class, function, and

type); usually taken from the TITLE field of the GIDEP

report

**I.D.** Manufacturer part number, national stock number,

specification number and/or base part, usually taken from

fields 5 through 10 of GIDEP ALERT Form 97-1

**PROBLEM DESCRIPTION** Basic statement of the problem, usually extracted from

field 22 of GIDEP ALERT Form 97-1

Marshall Work Instruction				
QD01				
MSFC ALERT Processing MWI 1280.5 Revision: F				
	<b>Date: October 15, 2004</b>	Page 29 of 32		

# Appendix D

# **MSFC ALERT Evaluation/Response Form with Instructions**

		MSFC A	LERT IN	ITIAL RESPO	ONSE FO	<u>ORM</u>
			Section 1: A	ALERT Informa	ition	
MSFC #: JWM04 Organization Status: OPEN 04/04/2000					OPEN 04/04/2000	
GIDEP #: TWX-A-99-07		77	Organization: II		INFO_*_INFO1_*_FYI1	
Date Issued: 03/23/2000 Due Date: 04/22/2000					04/22/2000	
Click here to view	the actua	ALERT docu	iment.			
			Section 2	2: Initial Respon	se	
Is Part Used?:	Select	one	Criticality:	Select one		fety Select one
Safety Critical Use:						
System:						
Assembly:	Assembly:					
Sub-Assembly:						
Other Affected						E
Projects /						
Payloads						
(if known):						=
Comment:						F
			Section 3	: Impact Respor	ise	
ALERT ISSUEI	AS "OF	EN"	Sand	y Haraway	03/23/2000	(automatic entry)
			Section	4: Closure Statu	ıs	
E	valuator:	John Mepher		Status:		Date:
		John Mepher		Status:		Date:
Impact F	eviewer:	John Mepher	son	Status:		Date:

Marshall Work Instruction				
QD01				
MSFC ALERT Processing	MWI 1280.5	Revision: F		
	Date: October 15, 2004	Page 30 of 32		

# Instructions For Filling Out MSFC ALERT Evaluation/Response Form

- 1. The Organization ALERT Coordinator shall submit an **individual** *MSFC ALERT Evaluation/Response Form* for **each** ALERT, which involves hardware used within the organization's scope of responsibility. An initial response (i.e., with the "Corrective Action/Rationale for Closure" perhaps not yet determined) to the MSFC ALERT Coordinator shall be required within 21 workdays of MSFC Distribution Date under normal circumstances or before launch if involved in the mission during launch-imminent mode. A full response (i.e., all fields completed) to the MSFC ALERT Coordinator shall be required within 21 workdays of MSFC Distribution Date (i.e., 1 month) under normal circumstances or before launch, if required (during launch-imminent mode).
- 2. The Organization ALERT Coordinator shall fill in his organization name or code in the "FROM" blank.
- 3. The Organization ALERT Coordinator shall fill in the GIDEP Number, MSFC Reference Number, and MSFC Transmittal Date (as shown on the *MSFC ALERT Problem Summary Chart*) for the impacted ALERT in the "SUBJECT" blanks.
- 4. If the Organization ALERT Coordinator is for a Program or Project and especially if there is a subcontractor involved, then the top portion of the memo body (i.e., "THIS RESPONSE AREA FOR PROGRAM/PROJECT USE") shall be used. Otherwise, the bottom portion of the memo body (i.e., "THIS RESPONSE AREA FOR DIRECTORATE/OFFICE USE) shall be used. Note that the two areas are identical except for the "Contractor Response Date" field, which only appears on the PROGRAM/PROJECT portion and the list of projects/payloads/experiments affected by this ALERT in the DIRECTORATE/OFFICE USE section.
- 5. If response was generated by a support contract for input by the Organization ALERT Coordinator, the Organization ALERT Coordinator shall enter the date of receipt of that information in the "Contractor Response Date" data field.
- 6. Since the part IS used, an **X** shall be entered to the left of the "YES" block for "Part is used:". If the answer is NO, then completion of this form shall not be required.
- 7. If this is a Directorate/Office submittal, then the submitter shall indicate in the designated data field any and all possible organizations, projects, payloads, experiments, etc. supported by the Directorate or Office which could have adverse effects from occurrence of the problem documented in the ALERT.
- 8. The Organization ALERT Coordinator shall mark an **X** before the evaluated response to "Criticality ?" to indicate the criticality of the hardware's application in the organization. This shall be based on an approved Failure Mode Effects Analysis (FMEA)/Critical Items List (CIL), if available, or direct evaluation of the definition. Criticality is defined as follows:

Marshall Work Instruction				
QD01				
MSFC ALERT Processing MWI 1280.5 Revision: F				
	<b>Date: October 15, 2004</b>	Page 31 of 32		

CRITICALITY	<u>DEFINITION</u>
1	Single failure point that could result in loss of vehicle or loss of flight or ground personnel.
1R	Redundant items, all of which if failed, could result in loss of vehicle or loss of flight or ground personnel.
1S	A single failure point of the system component designed to provide safety or protection capability against a potentially hazardous condition or event or a single failure point in a safety or hazard monitoring system that causes the system to fail to detect, or operate when needed during the existence of a hazardous condition that could lead to loss of flight or ground personnel or vehicle (e.g., fire suppression, medical hardware, etc.)
1SR	Redundant components designed to provide safety or protection capability against a potentially hazardous condition or event, all of which if failed could cause the system to fail to detect, or operate when needed during the existence of a hazardous condition that could lead to loss of flight or ground personnel or vehicle; OR redundant components within a safety or hazard monitoring system, all of which if failed could cause the system to fail to detect, or operate when needed during the existence of a hazardous condition that could lead to loss of flight or ground personnel or vehicle.
2	Single failure point that could result in loss of critical mission support capability.
2R	Redundant items, all of which if failed, could result in loss of critical mission support capability.
3	All others

- 9. In response to "Is it Safety Critical?", the submitter shall mark an **X** before the YES if the Criticality is 1 or 1R or if significant injury, although not life-threatening, could occur from lack of adequate performance of the hardware involved. Otherwise, the submitter shall mark an **X** before the NO.
- 10. If YES is marked for the "Safety Critical Use", the submitter shall explain the severity of possible injury and the failure processes which could result in injury in the "Explain Safety Critical Use:" field.

Marshall Work Instruction				
QD01				
MSFC ALERT Processing	MWI 1280.5	Revision: F		
	Date: October 15, 2004	Page 32 of 32		

- 11. For "Where is part used?", the submitter shall describe the system, assembly, subassembly, and basic use of the entity associated with use of the ALERT component.
- 12. For "Corrective Action/Rationale for Closure:", the submitter shall describe steps taken to prevent or mitigate possible adverse effects from malfunction of the ALERT item.

NOTE: This data field is NOT required for the initial response (within 21 workdays or before launch), but is required for full closure (within 21 workdays or before launch).

13. "Signature" and "Date" fields may be signed (for facsimile transmittal) or electronically entered for e-mail. They should be filled in each time the form is submitted to the MSFC ALERT Coordinator - both for the Initial Response (with or without the "Corrective Action/Rationale for Closure" data) and for the Full Response (including the "Corrective Action/Rationale for Closure").